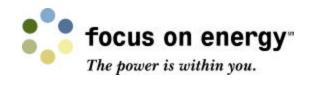
## Focus on Focus

Briefing provided for

Governor Doyle's

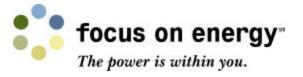
Task Force on Energy Efficiency
and Renewable Energy

Peter Bock December 16, 2003



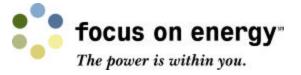
#### **Vision**

The People of Wisconsin will make sound energy efficiency and renewable energy investments that result in sustained economic growth and a healthy environment for current and future generations.



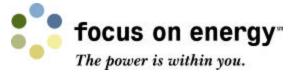
#### **Mission**

- ▼ Focus on Energy develops and operates a broad range of sustainable energy efficiency and renewable energy programs. In partnership with consumers, utilities, businesses, non-profit organizations and government at all levels, this portfolio of programs will:
  - ➤ Reduce the amount of energy used per unit of production in Wisconsin while improving energy reliability
  - Expand the ability of markets to deliver energy efficient and renewable goods and services to consumers and businesses
  - Deliver quantified financial returns on public investments in energy improvements
  - > Reduce the environmental impact of energy use
  - ➤ Enhance economic development and make Wisconsin firms more competitive



# History of Focus on Energy Development

- 1999 Act 9 contained Reliability 2000 provisions
- DOA brought together leading practitioners and theoreticians of EE and RE
- Two days of DOA asking questions and recording discussion and ideas
- Questions and Summary available at the web site



## **January Meeting Participants**

Karen Anderson - Alliance to Save Energy

Susan Coakley - Northeast Energy Efficiency Partnerships
 Jeffrey Genzer - Duncan, Weinberg, Genzer and Pembroke

Chuck Goldman - Lawrence Berkeley National Laboratory

Marc Hoffman - Consortium for Energy Efficiency
Steve Clemmer - Union of Concerned Scientists

Anna Garcia - US Environmental Protection Agency

Donald Gilligan - National Association of Energy Service Companies

Chuck Guinn - Strategic Guidance Associates

Brian Henderson - New York State Energy Research and Development Agency

Val Jensen - US Department of Energy

Roby Roberts - Renewable Energy Policy Project

Elizabeth Sparrow Robertson - Georgia Division of Energy Resources

Mark Wolfe - National Energy Assistance Directors Association

Gail McKinley - US Department of Energy

Steven Nadel - American Council for an Energy Efficient Economy

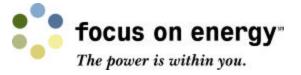
Richard Sedano - Vermont Deptartment of Public Service

David Terry - National Association of State Energy Officials



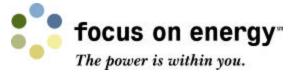
#### Request for Information

- Specific questions
  - Overall program structure
  - Specific programmatic input
- Responses from 34 businesses and individuals
  - 257 page summary report
- Executive Summary available on the web site



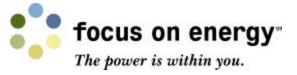
#### Pilot Experience

- Full day discussion of pilot contractors
- Pilot experience
- PSC, DOA and WPSC Partnership
  - PSC accepted pilot as meeting WPSC obligations
  - DOA delivered program under contract with WPSC
- Pilot evaluation reports



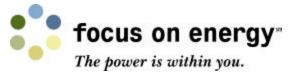
#### The Plan

- November 15, 2000
  - Vision
  - Desired Outcomes and Program Goals
  - Roles of DOA and Contractors
  - Discussion of Specific Programs
- Proposed an innovative suite of energy efficiency and renewable energy programs
- Available at web site



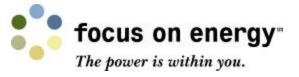
## **Public Hearing**

Public Hearing on April 5, 2001



#### A Solid Base to Build On

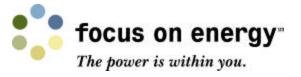
- More has worked than hasn't
- We got it up and running
  - We learned a lot
- Over 250 private sector firms under contract
- Over 3,000 trade allies participating
- Regular changes in response to evaluation findings
- Important to start from that base



## **Residential Programs**

#### Wisconsin Energy Conservation Corp.

- Energy Star Appliances and Lighting
- New Construction Energy Star Homes
- Existing Homes Home Performance
- Apartment & Condominium Services
- Residential Information Center
- Education & Training
- Targeted Home Performance with Energy Star®

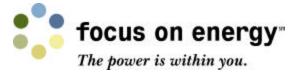


## **Business Programs**

#### Milwaukee School of Engineering

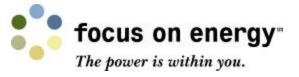
- Market Sector
  - Industrial
  - Commercial
  - Local Government& Institutional
  - Agriculture

- Cross Functional
  - Industries of the Future
  - Energy Efficient Products
  - Rural Communities



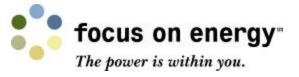
#### **Market orientation**

- Focus has developed "market equity"
  - Firms have changed market models
    - Veridian Homes
    - Windows manufacturers
  - Center for Technology Transfer
    - Fiber Recovery Technologies
  - Don't lose the market support that has been developed
- Large numbers of partners and allies



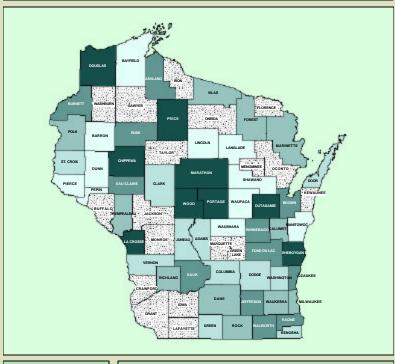
## Long term and Short-term balance

- Short Term
  - Immediate savings and load reduction
  - More easily measured
  - Centrally directed and financial incentive based
- Long term
  - Greater savings, but over longer time period
  - Difficult to measure with precision
  - Driven by market development opportunities
    - Not Financing Incentives



## **Consistent Statewide Program**

Wisconsin Focus on Energy Industrial Programs
Per Capita\* Energy Bill Savings by County



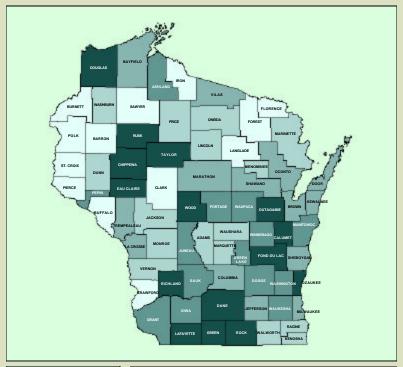


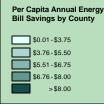
The map above portrays the annual energy savings realized by projects implemented through programs targeted at industrial sector businesses as of September 30, 2003. Electric and gas savings have been valued at the average cost of gas and electricity for industrial businesses in Wisconsin and summed for all projects within each county and divided by the number of eligible industrial businesses in that county.

\*The unit of population is industrial customers in industries targeted by the industrial programs in participating utility territories.

Map Produced by: PA Government Services and Patrick Engineering Inc of The Focus on Energy Evaluation Team. November, 2003.

Wisconsin Focus on Energy Residential Programs
Per Capita\* Energy Bill Savings by County





The map above portrays the annual retail value of the energy savings realized by projects implemented through programs targeted at households as of September 30, 2003. Electric and gas savings have been valued at the average cost of gas and electricity in Wisconsin and summed for all projects within each county and divided by the number of eligible households in that county.

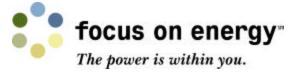
\* The unit of population is residential customers in participating utility territories.

Map Produced by: PA Government Services and Patrick Engineering Inc of The Focus on Energy Evaluation Team. November, 2003.



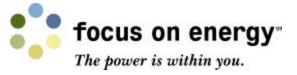
# Training and Management Orientation

- Practical Energy Management
- Building Operator Certification
- Training for builders and building trades
- Training for solar and wind installers
- Residential Training
- Teach people to fish, don't just buy them fish



#### **Comprehensive Approach**

- Services to all sectors of Wisconsin population and economy
- Individual sectors also addressed
  - Laundries
  - Lodging
  - Grocery refrigeration

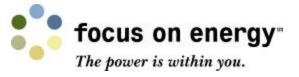


## **Third Party Verified Results**

Well regarded, international firm

- We have results
- We have documented those results
- They conform to the program Vision and Mission

Results support ongoing course corrections



## **Rigorous Evaluation**

- Energy
  - kWh, KW, Therms
- Environment
  - NOx, SOx, CO2, Hg
- Economic Development
  - Jobs, Business Sales, Personal Income
- Fiscal
  - Benefit Cost Ratio, Business and Residential Savings



## **FY03 Expenditures**

BUSINESS PROGRAMS	\$22,348,148
RESIDENTIAL PROGRAMS	\$22,077,384
RENEWABLE SET-ASIDE	\$2,513,950
ENVIRONMENTAL RESEARCH PROG	\$402,874
EVALUATION	\$3,278,200
COMPLIANCE	\$163,912
MARKETING	\$1,614,028
DOA ADMINISTRATION	\$1,040,131
TOTAL EXPENDITURES	\$53,438,627

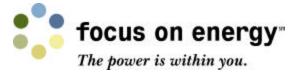


## **Annual Gains Being Realized**

#### **Through FY03**

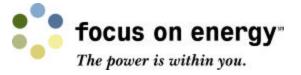
Residential Savings	\$13,206,896
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Business Savings	\$11,107,853
3	T , - ,



## **Direct Energy Savings**

	FY02	FY03
Kilowatt Hours	53.0 million	214.8 million
Kilowatts	9,845	32,500
Therms	2.5 million	7.2 million



#### **Emission Reductions**

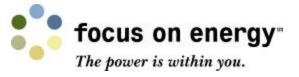
(Program to Date)

Nitrogen Oxide 1,806,448 lbs.

Sulphur Dioxide 2,893,464 lbs.

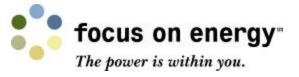
Carbon Dioxide 375,368 Tons

Mercury 10 lbs.



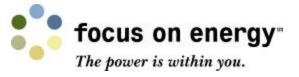
#### **Benefits vs. Cost**

- Wisconsin receives savings valued at \$3.00 for every \$1.00 invested.
  - Direct lifetime energy benefits
- Wisconsin receives savings valued at \$5.70 for every \$1.00 invested
  - Counting all lifetime energy and non-energy benefits and economic impacts



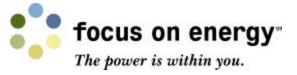
## **Major Areas of Concern**

- Funding Equity
- Funding security and reliability
- Relationship to Strategic Energy Assessment
- Administrative Structure



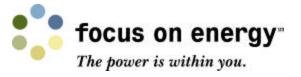
## **Funding Equity**

- Residential rate based payment
  - \$1.06/year to \$18.56/year
  - Based on service territory
- Commercial/Industrial
  - \$5.07/year to \$238.11/year
  - Based on service territory
- Based on PSC determination of 1998 expenditures for Public Benefits



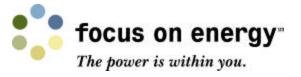
#### **Fund Security**

- Lack of long-term planning ability
  - Hinders PSC in the SEA process
  - Hinders partners in making business plans
- Legislative diversion
- Political influence
  - An issue as long as \$ are in state appropriation
- Alternatives
  - Trust Fund
  - Fiscal Agent
  - Rate Base



# Tie to Strategic Energy Assessment

- Coordination with PSC
  - Integral part of the way Wisconsin meets energy demand
    - Need to plan with reliance that plans will be fulfilled
  - PSC should have input to program parameters and guidelines
    - Size, Cost-effectiveness, Limits, etc.
- If SEA does not integrate Energy Efficiency and Renewable Energy achievements, it risks overestimating the need for new generation and transmission.
- This is more than a "nice to do" activity



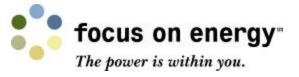
## Long-term admin structure

- Distinguish functions
  - Fund handling
  - Program design and delivery
  - Program oversight
  - Goal setting and revenue determination



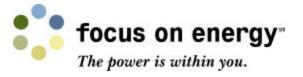
## In Closing

- Focus is based on thorough research and industry best practices
- Focus has produced significant, documented savings
- Four Key Public Benefits Issues
  - Funding Equity
  - Funding Security
  - Tie to Strategic Energy Assessment
  - Long Term Administrative Structure



#### **Web Site**

Http://energytaskforce.wi.gov



## Focus on Energy Fact Sheet



